



UNITED STATES PATENT AND TRADEMARK OFFICE

62
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/502,834	02/11/2000	Tetsuo Kodama	203924	5735

7590

01/21/2004

John Kilyk, Jr.
Leydig, Voit & Mayer, Ltd.
Two Prudential Plaza
180 North Stetson, Suite 4900
Chicago, IL 60601-6780

EXAMINER

TRUONG, DUC

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/502,834

Applicant(s)

KODAMA ET AL.

Examiner

Duc Truong

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Nov 07, 2003
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Response to Amendment

Applicant's arguments filed Nov 7, 2003 have been fully considered but they are not persuasive. The response and the Declaration submitted by Applicant do not overcome the rejection made by Examiner in the last Office action.

Claims 1-3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over So et al.

The rejection is maintained for the reasons as stated in the last Office action and for the following reasons:

Note that the Declaration under 37 C.F.R 1.132 has been submitted to disclose the polybenzazole articles (samples 6 and 7) containing o-aminophenol/p-phenylenediamine (1:1) or m-phenylenediamine/p-phenylenediamine (1:1) as light resisting agents showed a strength retention of 34% or 55%, compared to the 1-naphthol (23%) or 2-naphthol (27%), as disclosed in the reference.

Said arguments have been fully considered but they are not persuasive since the Markush terminology used in claim 1 has limited to some components excluding the mixtures with the required ratios 1/1 in Samples 6-7. Further, applicant said that by mixing two kinds of light resisting agents, the strength retention will be higher. That means, if only one claimed light resisting agent is used, the strength retention will be lower than 34%, and could be dropped within the range of naphthol, as disclosed in the reference.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Truong whose telephone number is 703-308-2437. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 703-308-2462. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



DUCTRUONG
PRIMARY EXAMINER

DT

DETAILED ACTION

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over So et al of record on 1449.

The reference discloses a polybenzazole dope filament comprising a polybenzazole polymer (see col. 2, lines 10 et seq.) and about 1 to 10 % by weight of dye compounds comprising naphthols (see col. 6, lines 25-30).

Note that said dye compounds are useful to absorb light with a wavelength in the range of from about 300 nm to about 600 nm (see col. 6, lines 30), overlapped with these in the claims.

The disclosure of the reference differs from the instant claims in that it does not disclose the claimed specific light resisting agent such as aniline, phenylene diamine, aminophenol, nitrophenol, sulfonamide, and diaminophthalene.

However, the reference does disclose the use of naphthols having the same functionality with the claimed light resisting agent, to absorb light with the wavelength of from 300-600 nm. Therefore, it would have been obvious to one of ordinary skill in the art to select the naphthols, as disclosed in the reference, to replace said light resisting agent of the claims since they have been shown to be effective in a similar system and

thus would have been expected to provide adequate results. There is no showing of unexpected results derived from said selection.

The Declarations have been fully considered but they are not persuasive because there is no comparative examples have been provided between the claimed light resisting agents and the naphthol, as disclosed in the reference.

Applicant's arguments are based on the structures of the light resisting agents, whereas the Examiner's arguments are based on the functionality of said light resisting agents, as in the claims (the claims disclose the functionality of said light resisting agent).

Applicant does not argue why the naphthol, as disclosed in the reference, can not be considered as light resisting agent.

Applicant is correct in stating that the claimed light resisting agents, when combined with a polybenzazole, to form an article of not more than 30% in not less than 30% of the wavelength region of from 450 nm to 700 nm, so does naphthol, unless Applicant provides evidence to show that they are different.

The Declarations have been submitted to show the strength retention after xenon light exposure of said claimed light resisting agents, for 24 hours is >51%, so does naphthol, unless Applicant provides evidence to show that they are different.

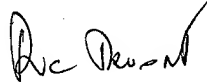
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Truong whose telephone number is 703-308-2437. The examiner can normally be reached on Monday-Friday.

Application/Control Number: 09/502,834
Art Unit: 1711

Page 4

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 703-308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9791 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



DT
May 5, 2003

DUCTRUONG
PRIMARY EXAMINER